

Title (en)  
INTAGLIO PRINTING INK

Title (de)  
TIEFDRUCKTINTE

Title (fr)  
ENCRE D'IMPRESSION EN CREUX

Publication  
**EP 2489709 A4 20140910 (EN)**

Application  
**EP 10823351 A 20101008**

Priority  
• JP 2009238817 A 20091016  
• JP 2010067752 W 20101008

Abstract (en)  
[origin: EP2489709A1] There is provided an intaglio printing ink that causes little set-off, exhibits improved chalking resistance, and attains improved print quality, and which permits low-cost prevention of blocking by low-dose irradiation with ultraviolet light. The intaglio printing ink comprises at least an ultraviolet curable composition, an oxidation polymerizable composition, a photopolymerization initiator, an oxidation polymerization catalyst, and a pigment. An acid-modified epoxy-acrylate prepared by reacting a polybasic acid anhydride with an epoxy-acrylate obtained by reacting an acrylate, having two or more acryloyl groups and one carboxyl group in one molecule, with an epoxy compound, having two or more epoxy rings in one molecule, is used as the ultraviolet curable composition.

IPC 8 full level  
**C09D 11/033** (2014.01); **C09D 11/037** (2014.01); **C09D 11/10** (2014.01); **C09D 11/101** (2014.01); **C09D 11/102** (2014.01); **C09D 11/106** (2014.01)

CPC (source: EP US)  
**B41M 1/10** (2013.01 - US); **C09D 11/02** (2013.01 - EP US); **C09D 11/101** (2013.01 - EP US)

Citation (search report)  
• [XD] JP 2007145962 A 20070614 - NAT PRINTING BUREAU  
• [X] JP 2009227702 A 20091008 - NAT PRINTING BUREAU  
• [Y] US 5858618 A 19990112 - TZOU MING-JEN [TW]  
• [Y] WO 2009013169 A1 20090129 - SICPA HOLDING SA [CH], et al  
• [A] EP 0588534 A2 19940323 - HAYAKAWA RUBBER [JP], et al  
• See references of WO 2011046083A1

Cited by  
US11339303B2; EP3453745A1; WO2019052951A1; WO2021018771A1; WO2020053543A1

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DOCDB simple family (publication)  
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**EP 10823351 A 20101008**; CN 201080055511 A 20101008; JP 2010067752 W 20101008; JP 2011536121 A 20101008; KR 20127012533 A 20101008; US 201013501904 A 20101008